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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,287	07/09/2003	Hiroyuki Takahashi	16816	9906

23389 7590 08/17/2006

SCULLY SCOTT MURPHY & PRESSER, PC
400 GARDEN CITY PLAZA
SUITE 300
GARDEN CITY, NY 11530

EXAMINER

JOHNSON III, HENRY M

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/616,287	Applicant(s) TAKAHASHI, HIROYUKI	
	Examiner Henry M. Johnson, III	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 20, 2006 has been entered.

Applicant's arguments filed July 20, 2006 have been fully considered but they are not persuasive. The operation of multiple surgical devices is common in the art and the safety considerations associated with multiple devices is well known. Applebaum et al. clearly recognize such considerations in providing methodology for allowing or not allowing devices to operate together (synchronously) via communications links between the devices/controllers.

The applicant argues the methodology of the invention has the advantage of new devices being easier to incorporate into the system. The examiner fails to understand how reprogramming multiple medical device's decision making unit is more advantageous than altering a single program in a host system. The device's identification units would also need to be programmed in each medical device to recognize any new treatment devices.

The applicant argues that both device identification and drive data are required for synchronization on page 8 of the remarks. Claim 33 allows activation of a second device from the first switch based on the identification of the first device only, regardless of a drive signal.

The applicant has argued that decision making within the individual medical devices is unique. Such decisions are based on the programming of the individual units and yield functionality as disclosed in Applebaum et al. The specific device in which the decision is made is clearly based on the design of the system and desires of a skilled artisan. Further,

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Applebaum et al. with both a host system and microcontrollers for each medical device is capable of making decisions in any of those processors.

A device with means for positive identification is clearly capable of being recognized when added as a new device.

The applicant's arguments regarding claims 36 and 37 appear invalid. Claim 34, from which 36 and 37 depend, requires drive information for synchronization. This implies the absence of such signal will prevent synchronization regardless of any timing considerations.

Regarding the 35 U.S.C. § 103 rejections with Fischer, it is proper to take into consideration not only the teachings of the prior art, but also the level of ordinary skill in the art. In re Luck, 476 F.2d 650, 177 USPQ 523 (CCPA 1973). Specifically, those of ordinary skill in the art are presumed to have some knowledge of the art apart from what is expressly disclosed in the references. In re Jacoby, 309 F.2d 513, 135 USPQ 317 (CCPA 1962).

Drawings

The informal replacement drawings are acknowledged, however, when the application is allowed, applicant will be required to submit new formal drawings.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 33-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 33 is indefinite as the term "at least one treatment equipment" implies multiple equipments may be associated with each device, yet the disclosure does not so indicate. The term "judging portion" is new matter not previously introduced or disclosed. It appears this term has replaced the identification portion used previously, yet has no definition or explanation for the change in terminology.

Claim 34 is indefinite for conflicting with claim 33. Claim 33 indicates identification of the treatment equipment is the determining factor for synchronization, while claim 34 indicates positive indication of driving information. Clarification is required.

Claims 36 and 37 appear to be in conflict with claim 34 in that they imply a time between loss of a driving information signal and cessation of synchronous operations. Claim 34 prohibits synchronous operations without a driving information signal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 33-35 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,117,126 to Applebaum et al. in view of U.S. Patent 6,793,652 to Whitman et al. Applebaum et al. teach a surgical system with independent microprocessor control of a plurality of surgical instruments with communications between the surgical instruments (abstract). The instruments (Fig. 2, #19) each have a microprocessor interface module (Fig. 2, # 13) connected to a bus for communications to a main computer unit (Fig. 2, # 271). The microprocessors are interpreted as control units and by definition are programmable and thus are capable of decision

making regarding synchronization based on the program code. Panel controls (switches) or a foot switch (Fig. 2, # 15) may operate the instruments. It is inherent that the processor would know the status of the control panel switches.

Applebaum et al. teach it may be desirable to prevent certain instruments from operating simultaneously for safety reasons. For example, a phacoemulsification instrument is disabled by the bipolar coagulation instrument when the latter is being used and vice-versa. In contrast, the aspiration function is needed during phacoemulsification or phacofragmentation (Col. 18, lines 10-20). Thus, Applebaum et al. clearly teach a permission/no permission capability. The identification of each module is known to the system as are the operating parameters of the module and its instrument (Col. 20, lines 55-

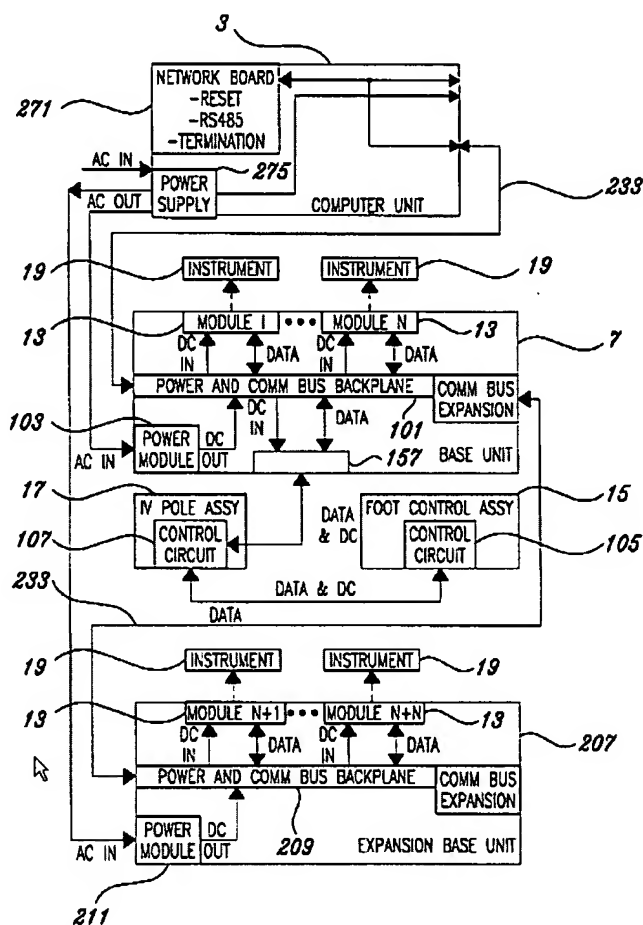


figure 2

60). The modules and the central computer make up a control device. While Applebaum et al. teach the identification of the instruments by identification of control modules, a dynamic identification is not disclosed. Whitman et al. teach a surgical system wherein data on the instrument is stored in memory when it is attached (Col. 10, lines 5-15). In addition to the serial number of the instrument, usage data is also provided. Clearly, if an instrument were disconnected or exchanged, the identification information would change, providing new inputs to the control units that determine synchronous operations. It would have been obvious to one

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having ordinary skill in the art at the time the invention was made to sense the instrument when it is attached as taught by Whitman et al. in the system of Applebaum et al. when instruments are likely to be interchanged or replaced to insure safety of operations. The usage parameters included in the Whitman et al. identification information provides ample motivation when the operation of multiple devices must be coordinated for safety considerations.

Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,117,126 to Applebaum et al. in view of U.S. Patent 6,793,652 to Whitman et al. as applied to claim 34 above, and further in view of U.S. Patent 5,502,726 to Fischer. Applebaum et al. and Whitman et al. are discussed above, but do not disclose timeouts. The use of timeout circuits and watchdog timers is well known in the art as evidenced by the Fischer patent that teaches a medical network that uses a watchdog timer (Fig. 5, # 526) to check for timeliness of data transfers and to initiate a program sequence in the event of a timeout. Watchdog timers are designed to detect abnormal conditions by looking for a recurring signal. Action is initiated if the signal is not detected. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the timeout circuits as taught by Fischer in the system Applebaum et al. in view of Whitman et al. to insure system integrity using a technique pervasive in the art.

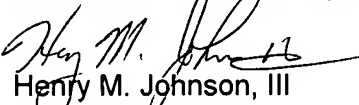
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Henry M. Johnson, III
Primary Examiner
Art Unit 3739